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Governor

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April 30, 1992



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Dear Public Meeting Participant.

Thank you for taking the time to share your comments, suggestions and concerns at the March 31, 1992 public meeting of the Health Advisory Panel at the Ramada Hotel in Westminster Your input is very valuable

We have enclosed for your information a summary of some of the key questions and concerns raised at the meeting, with brief responses. The notes from each round table discussion indicate that many participants had similar questions and concerns, which we have attempted to consolidate and address in the enclosed summary. The summary does not include answers to specific questions or issues that relate to detailed technical aspects of the study. Technical details will be addressed in future project reports or briefing documents.

Some of the issues raised at the meeting are difficult to address because of the absence of historical documentation or the limitations of current scientific knowledge. The Health Advisory Panel is carefully reviewing these issues.

Communicating the results of the study was an issue several people raised. We are aware of the challenge in explaining complex dose and risk information so that it is meaningful to the non-scientific public. During the next several months we will be developing tools and information to communicate the study results and would welcome your ideas or suggestions

We appreciate your input and hope you will continue to participate in the study process. Your comments or questions are always welcome. Although the next public meeting is not scheduled until fall, we are interested in presenting information about the study to community or business groups at any time. Please call Ann Lockhart at the Health Department, 331-8792, if you would like to schedule a meeting.

Sincerely,

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Norma C. Morin, Ph D., M.P H Rocky Flats Health Studies

Enclosures

Responses to Public Comments

from the March 31, 1992 Health Advisory Panel Meeting Rocky Flats Historical Public Exposures Study

1. Several participants asked whether the ChemRisk study incorporates available off-site environmental monitoring data, including animal tissue analysis.

Response: Extensive environmental data has been collected from air, soil, and water sample analyses over the past 40 years by the plant operators and other agencies. Some limited sampling of animal tissues has also taken place. The interpretation of this mass of data is complicated by the need to adjust for the different methods of collection and analysis, gaps in coverage, and adjustment for the presence of contaminants from sources other than Rocky Flats (background contamination).

The dose reconstruction study was designed to quantify historical emissions from the plant and to estimate concentrations of contaminants released into the environment. Sampling data are being selectively used to confirm estimates, identify major inconsistencies and evaluate exposures where plant emissions data are not available.

2. The study should include additional off-site environmental sampling and sampling of wastes, particularly from accidents.

Response: The current scope of ChemRisk's work does not include additional environmental sampling or analysis. However, the Health Advisory Panel has raised the issue of environmental sampling at past meetings and has appointed a subcommittee to evaluate this need. The subcommittee recommendations will be presented to the full panel and then forwarded to the State for consideration.

3. The Task 3 & 4 "Rocky Flats History" Report contained statements that prejudged conclusions.

Response: The report was released as a draft and contained a few statements that were not supported by the information presented in the report. Because this report is intended to be a compilation of historical material and does not include data analysis, these statements were inappropriate and will be removed from the final draft.

4. Are monitoring data from plant emissions being compared to regulatory standards?

Response: The purpose of this study is not to determine whether the plant was in compliance with regulatory standards historically, but to evaluate health impacts to the off-site public based on current-day knowledge. Regulatory requirements have changed over time, as has our understanding of health risks.

5. Will the results of this study be used to address environmental cleanup, drinking water issues and issues of future risk?

Response: The purpose of the study is to compile as much information as possible about past operations and releases to evaluate the exposure risks, within the limitations of the study. The information that is released may be of some value in evaluating future actions, although that is not the objective of this work. The U.S. Department of Energy and EG&G Rocky Flats are conducting other studies to address current and future risks from the plant in order to make decisions on cleanup of contamination.

6. How are releases from unmonitored "classified" stacks being addressed?

Response: Considerable effort has been made to identify any stacks or release points that operated on a routine basis and were unmonitored. The study team has had access to classified information during this investigation. To date, no evidence has been located that suggests such stacks existed in the past.

7. Is the document search process adequate? (Concern was expressed over use of documents generated by plant operators.)

Response: The study team has gone to great lengths to evaluate as much data and information from as many sources as possible. The various types of documentation associated with Rocky Flats (as discussed in the Task 364 report) fills numerous storage rooms. ChemRisk has employed a systematic process and techniques that the Health Advisory Panel believes to be the most effective in identifying information relevant to this study. There is no question that other methods could be employed. However, the Colorado Department of Health and the Health Advisory Panel are confident that the document search process was as thorough as possible within the scope of this study.

8. Will the study address resuspension of plutonium in soil?

Response: The current modeling activities do include the evaluation of resuspension of plutonium in soil.

9. What sort of quality assurance/quality control (QA/QC) has been used for the Task 3 & 4 report (draft Rocky Flats History) and for the study in general?

Response: The Task 3 & 4 report presents a large amount of qualitative information that was pieced together from a variety of documents and interviews. Where possible, information was cross-checked between documents and verbal accounts for consistency. A number of key plant historians (long-term employees) have reviewed the report for accuracy. Where ChemRisk compiled quantitative data, they performed internal reviews to check the accuracy of their data entry.

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The Health Advisory Panel has invited several additional individuals in government agencies and the interested public to comment on the study documents in order to expand the quality assurance/quality control process. For the more quantitative phases of the project currently underway, formal internal and third party expert review of work products are important aspects of ongoing project quality assurance/qual_ty control.

For the study in general, independent oversight and quality assurance/quality control is performed by the members of the Health Advisory Panel which is balanced with scientists, physicians, government officials and community members.

10. Questions were raised about source term development (quantifying releases of contaminants), computer modeling assumptions and exposure pathway approaches, particularly related to tritium. Also, how will we compensate for the absence of data or information about some events?

Response: These questions relate to technical activities that are currently underway. Detailed discussions of the approaches to source term development, modeling and exposure pathway evaluations are contained in the interim materials prepared for the Health Advisory Panel. These materials are available in briefing books on file in the various reading rooms and libraries (see locations below). No data or information was found to document some events. In some cases, limited evaluation can be done using assumptions based on scientific knowledge and experience. In other cases, there is no basis for assumptions, and therefore ChemRisk will be unable to provide any further evaluations of these events.

Copies of study reports and briefing books are available at these locations:

Colorado Department of Health
Disease Control and Environmental
Epidemiology Division
3773 Cherry Creek Drive North, Suite 235
Denver, Colorado
(303) 331-8702 or -8792

Rocky Flats Reading Room
Front Range Community College
3645 West 112th Avenue
Level B, Center of Building
Westminster, Colorado
(303) 469-4435

Rocky Flats Environmental Monitoring Council 1536 Cole Boulevard, Suite 325 Denver West Office Park, Building 4 Golden, Colorado (303) 232-1966

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